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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,937	01/13/2004	James A. Bailey	Bailey 6-11	2017
22186	7590	07/01/2005	EXAMINER	
MENDELSON AND ASSOCIATES, P.C. 1500 JOHN F. KENNEDY BLVD., SUITE 405 PHILADELPHIA, PA 19102			LE, DINH THANH	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

EJL

Office Action Summary	Application No. 10/755,937	Applicant(s) BAILEY ET AL.	
	Examiner DINH T. LE	Art Unit 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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NON-FINAL REJECTION

The rejection over Jensen et al (US 5,729,230) is withdrawn in view of the arguments presented in the amendments.

The prior art newly found necessitated a new ground of rejection is below:

Claims Objection

Claims 13-20 are objected to because they do not include all necessary steps of the method claims. Correction is required.

Claim Rejections

Claim Rejections - 35 USC § 112

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction or clarification is required.

In claims 3 and 15, the recitation “the third gm cell comprises a set of switches that enable the third gm cell to be configured to have substantially zero transconductance” is confusing because it is unclear if this is additional “third gm cell” or further recitation of the previously claimed “at least one of the gm cell” on line 4 of claim 1. The same is true for reciting “one or more filter section” on line 2 of claims 7 and 17.

In claim 5, the recitation “the at least one filter section is adapted to be configured to oscillate” is misdescriptive because it is inconsistent with what is recited in claim 1. For example, lines 4-5 of claim 1 recites that the gm cell of the at least one or more filter section is configured to oscillate not the at least one filter section is configured to oscillate.

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In claim 7, the recitation "the at least one filter section" on line 5 lacks clear antecedent basis. Because it is unclear which "eat least one filter section" is referred to since there are two at least one filter section on lines 3-4. The same is true for claim 17.

The remaining claims are dependent from the above rejected claims and therefore also considered to be indefinite.

Claim Rejections

Claim Rejections - 35 USC 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless B

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5-14, 16-17 and 20 under 35 USC 102 (b) as being unpatentable over Deveirman (US 5,625,317).

As the best construed, Deveiman discloses a filter circuit in Figures 4-14 comprising:

- at least one of the one or more filter sections (1001, 1002, Figure 10), each comprising a plurality of transconductor (gm) cells (302-307, 600) on a main path; and
- at least one of the gm cells (600) being configured to have substantially zero transconductance ($gm_2=gm_{osc}$), lines 25-56, column 7 and lines 1-32, column 8, such that the filter section is oscillated at a cutoff frequency to tune each filter section.

With regard to claim 5, the at least one filter section (700, Figure 7) is adapted to be oscillated to tune other filter sections.

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With regard to claim 12, the recitation “ladder filter” is read on the filter circuit as shown in Figure 6.

Response to Applicant's Arguments

The applicant argues that the filter section of Jensen is configured to be oscillated when the fm cell has zero transconductance. The argument is persuasive. However, this limitation is disclosed in the Deveirman reference as stated above.

Allowable Subject Matter

Claims 3-4, 15 and 18-19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The claims are allowed because the prior art does not show:

- a third gm cell connected at both ends to the intermediate node; and a fourth gm cell connected between the output node and the intermediate node, wherein the third gm cell comprises a set of switches that enable the third gm cell to be configured to have substantially zero transconductance, such that the at least one filter section will oscillate; and the at least filter section comprises a tuning circuitry stored tuning control information for the at least filter section as combined in claim 18.

Conclusion

Any inquiry concerning this communication or earlier communications from the

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examiner should be directed to DINH T. LE whose telephone number is (571) 272-1745. The examiner can normally be reached on Monday-Friday (8AM-7PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY CALLAHAN can be reached at (571) 272-1740.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Dinh Le', with a stylized, flowing script.

DINH LE
Primary Examiner